

# Field Control Layer Device

## BACnet Advance Application Controller

# DAC8846BT

### 【Description】

DAC8846BT is a BTL listed standalone BACnet B-AAC class programmable controller with a TFT LCD touch control panel. It is designed for monitor and control building electromechanical device, large AHU, clean room, fume hood, large-scale end device control. It uses 32-bit microprocessor core, communication speed up to 76,800 bps, transmission distance up to 1,200 meters, With a programmable control functions, and supports time schedule, Calendar, alarm (Event enrollment) etc. DAC8846BT has 8 Binary Inputs(BI), 8 Analog Inputs(AI), 4 Binary Outputs(BO) and 6 Analog Outputs (AO). In addition it has an EIMnet port can connect up to 12 EIM series of expansion modules, allowing you to expand in response to the needs of various points. DAC8846BT is a BTL listed device, and fully compatible with any BACnet system. It is absolutely the best product for your building.



### 【Features】

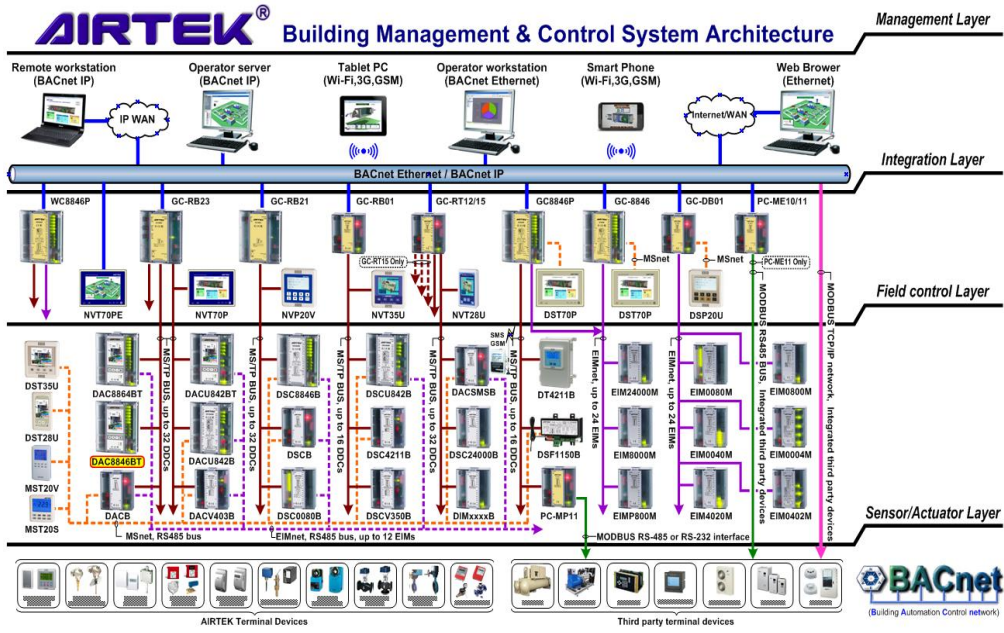
- BTL listed BACnet Advanced Application Controller (B-AAC) class device.
- 2.8" screen, 65,536 colors, touch screen TFT LCD, 320\*240 pixel, set up and edit with AIRTEK BACsoft software.
- MS/TP(Master-Slave/Token-Passing) communication interface, with Peer to Peer function can read and write other DDC's object, may issue a read (DS-RP-A/DS-RPM-A) and write (DS-WP-A) BACnet object properties function.
- EIMnet communication interface can connect up to 12 EIM I/O expansion modules, maximum limit less than 100 points.
- Binary input (BI) has 1,000Vrms optical coupling isolates capabilities and status indicator design.
- Binary output (BO) has 1,000Vrms optical coupling isolate, status indicators, Triac output, and manual on / off / auto three sections select switch.
- Analog Input (AI) has 16-bit resolution, can be jumper selectable to accept 3KΩ or 10KΩ NTC thermistor, 0~10VDC, and 4~20mA input signal.
- Analog Output (AO) has 16-bit resolution, can be software selected as a 0~10VDC output signal, each point has a manual override/auto output control switch.
- The user's control program can be downloaded, online edited and saved in flash memory of the controller.
- Carry out calculations such as proportional, integral, differential, floating, logic, arithmetic and etc.
- 150 Binary Value (BV) and 150 Analog Value (AV) points, the analog value adopts high precision floating-point calculation.
- Priority control array by 16 for all BO, AO and BV.
- Provide power failure backup functions for all AI/BO/AO/BV/AV values keep in FRAM for at least 10 years.
- Real-time clock, Calendars, Schedules, Notification Class, Event Enrollments standard BACnet object. Schedules and event enrollments support external object access function.
- TFT Touch screen is provided with 10 password levels. User can setup up to 20 passwords.

### 【Specification】

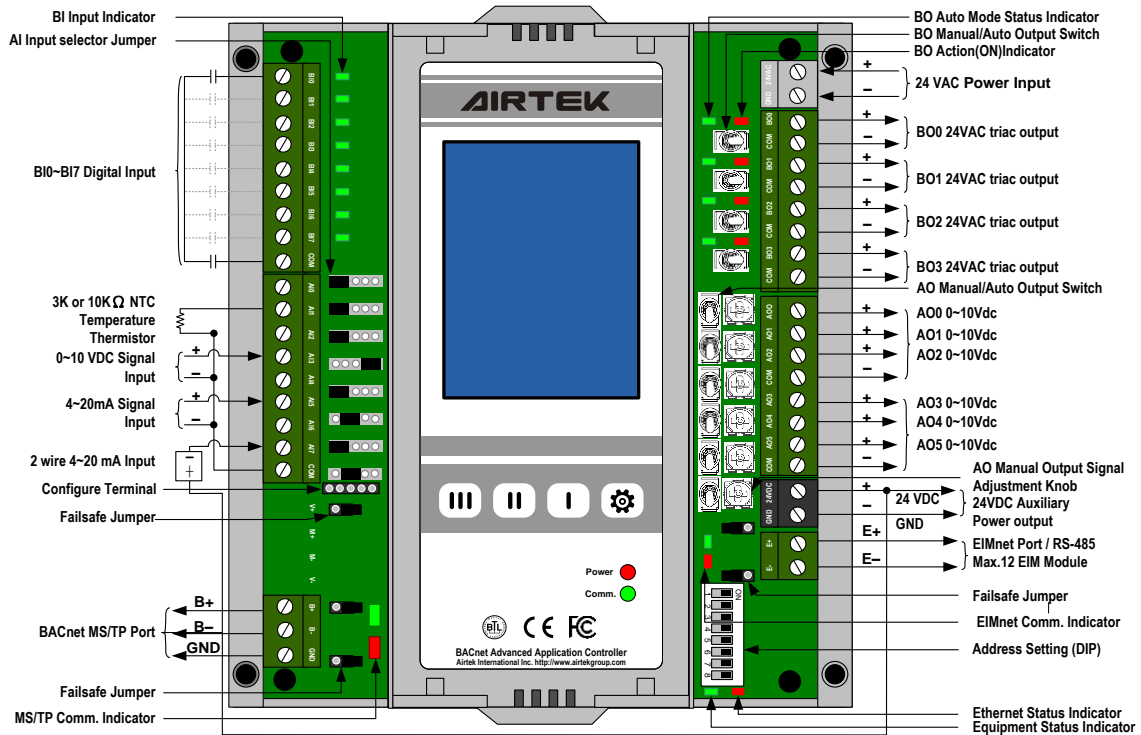
Model	BI	AI	BO	AO	EIM Q'TY	Calendars	Schedules	Notification	Event	BV Points	AV Points
DAC8846BT	8	8	4	6	12	2	12	4	20	150	150

- Power Supply** : 24VAC,3 5VA.
- LCD Display** : 2.8", 65,536 color, touch TFT LCD320\*240 pixels, 32-bit MCU for panel,8M memory for fonts and user data.
- Microprocessor** : Dual 32-bit MCU for DDC, 128K FRAM, 1M+128K+16K SRAM 及 8M+1M+64K Flash memory.
- Binary Input (BI)** : 12VDC detection voltage, 1,000VDC optical coupling isolator, accepts dry contact or open collector signal.
- Analog Input (AI)** : 16-bit resolution, jumper selectable to accept 3K/10KΩ NTC thermistor, 0~10VDC, or 4~20mA signal.
- Binary Output (BO)** : 0.5A/24VAC (Hot-switched triacs) output. 7,500Vpeak. With manual on / off / auto switch, can monitor the status.
- Analog Output (AO)** : 16-bit resolution, 0~10VDC. With manual / automatic switch and output signals adjust knob.
- MS/TP Port** : MS/TP MODBUS RS-485, communication speed 9,600/ 19,200/ 38,400/ 76,800 bps, auto select, max. length 1,200 meters, having 2500Vrms optical coupling isolator and 560Vpeak Anti-interference.
- EIMnet Port** : MODBUS RTU RS-485, communication speed 38,400 bps, max. length 1,200 meters, up to 12 EIMs.
- Real Time Clock** : A build-in gold capacitor can back up real time clock after power failure.
- Environment** : 0~50℃, 20~90%RH, non-condensing
- Certification** : BTL(B-AAC), CE, FCC, and RoHS

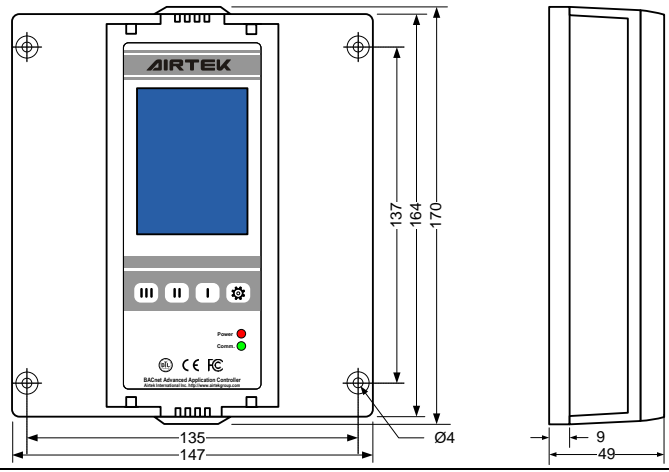
# 【Network Architecture】



# 【Wiring Diagram】



# 【Dimension】 Unit : mm



Please refer to <http://www.airtekgroup.com> for the most recent update information.